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(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(54) Title: METHOD OF FORWARD ERROR CORRECTION

WO 2004/001976 A2
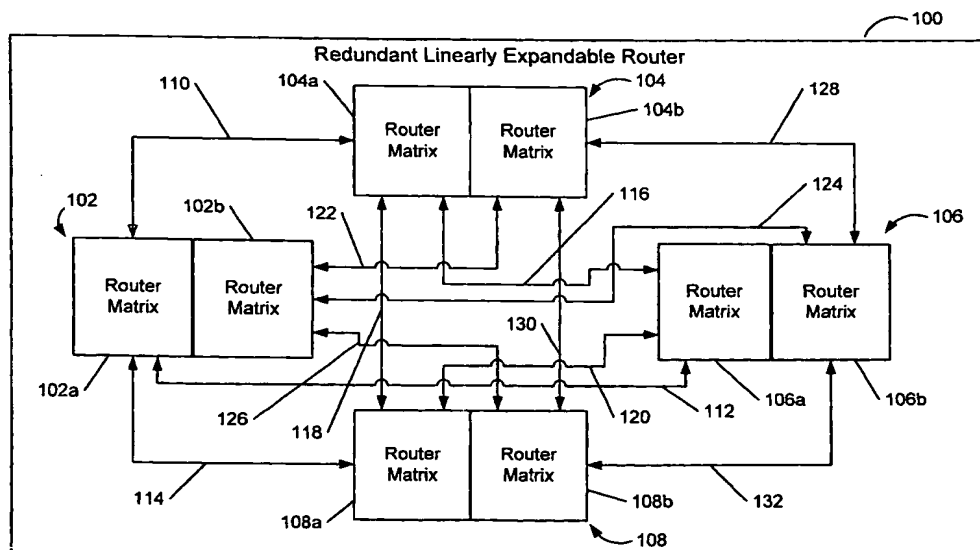
(57) Abstract: An iterative method of correcting errors in a data block (164). Bad bytes are first identified using information derived from an 8B/10 encoding/decoding of the data block (164). Within each identified bad byte, suspect bits are subsequently identified using information derived from parity encoding of a row of the data block (164) in which the bad byte is located. Each suspect bit is then classified as either a confirmed error bit or as an unconfirmed error bit using information derived from parity encoding of a column of the data block (164) in which the suspect bit is located. Confirmed error bits are then corrected, the parity bits corresponding to the confirmed error bit reset, and the bad byte cleared. The process is then repeated if one or more bad byte remain in the data block (164).